

## **METHOD AND APPARATUS FOR LOCATING AND TRANSFORMING DATA**

5

### **ABSTRACT**

The invention provides method and apparatus for locating data in a data file and for transforming the data. The method comprises the steps: determining the data unit to be located in the data file; determining a type for the data unit, the type including “Text”, “SingleLine”,  
10 “MultiLine”, “Block” and “Iterator”; when the type of the data unit is not “Text”, selecting a different data unit as the location reference for the data unit; generating the location description for the data unit, based on the type of the data unit and the position relationship between the data unit and the different data unit, the description including the type of the data unit, one or more location elements for locating the data unit and including “Top”, “Bottom”, “Left” and  
15 “Right”, each of the location elements including a combination of attributes so as to determine the position of the location element. The invention may locate the data position by two dimensional area.